UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
TECHNOLOGY DEVELOPMENT AND APPLICATION, ECOLOGICAL SCIENCE
WASHINGTON, D.C.

and the

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
LEXINGTON, KENTUCKY

and the

KENTUCKY AGRICULTURAL EXPERIMENT STATION
UNIVERSITY OF KENTUCKY
LEXINGTON, KENTUCKY

NOTICE OF GERMPLASM RELEASE OF (KY1625) SWITCHGRASS. PI431575

The United States Department of Agriculcure Soil Conservation Service and the Kentucky Agricultural Experiment Station announce the germplasm release of Ky-1625 switchgrass.

Method of Selection

This strain of switchgrass (*Panicum virgatum* L.) was collected October 1966 from Raleigh Co. West Virginia along the south side of the New River alluvium, up river from highway 19 bridge, and accessioned KY-584. Seed from Ky 584 was planted and selected from a collection of 35 other native switchgrass accessions at the Plant Material Center, Quicksand from 1967 to 1970. In 1971 clonal material was planted for comparison with 51 switchgrass accessions, including the first 35, plus new collects with 'Blackwell', 'Lave-in-Ruck', 'Nebraska 28', 'Pathfinder', 'Wabasso', 'Pangburn', 'Kanlow', cultivars. This evaluation was made to select for fine stems, leafy characteristics and late maturity. Ky 584 was the superior accession for these traits. Clonal material was again selected from Ky 584 and placed in .1 acre seed increase and accessioned (Ky 1625) P.I. 431575. Seed from the .10 plot was used to reach a total increase of 2.86 acres.

This selection of switchgrass P.I. 431575, matures later than 'Blackwell'; it is more leafy than 'Blackwell' or 'Kanlow'. It has the highest leaf-stem ratio among the switchgrasses tested, and has consistently shown higher protein and digestibility levels among switchgrass species, one limiting factor is its poor seed quality and seedling vigor. Average percent of total non-structural carbonhydrates in the rhizomes shows P.I. 431575 highest among four switchgrass strain tested, after three growing seasons, with different management schemes imposed in a study at the University of Kentucky.

Notice of Germ Plasm Release of (KY1625) Switchgrass (Continued)

Area of adaptation is similiar to that of other switchgrass strains. It has performed satisfactory in plots for forage and on surface mine spoils in Kansas, Kentucky, Ohio, Pennsylvania, New York, New Jersey, North Dakota, and West Virginia.

Approximately one acre or less of breeders seed will be maintained by the Soil Conservation Service, Plant Materials Center at Quicksand, Kentucky.

APPROVED BY:

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Director, Ecological Sciences and Technology Division — Date
U.S. Department of Agriculture, Soil Conservation Service

— 7-1-87

State Conservationist, U.S. Department of Agriculture — Date
Soil Conservation Service, Lexington, Kentucky

6/8/87

Director, Kentucky Agricultural Experiment Station — Date
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